CONSERVATION ELEMENT

GOAL 1 To preserve, protect, and enhance the City's natural resources, encourage the highest possible environmental quality and maintain best long-term management of natural resources.

OBJECTIVE 1.1: Codes, Ordinances and Regulations

The City shall continue to implement, revise, maintain and adopt new codes, ordinances and regulations as necessary, to protect and conserve the City's natural resources including

- Air;
- Beaches, shores;
- Fisheries:
- Native plant and animal communities and ecosystems;
- Noise Level;
- Wetlands;
- Soils:
- Water;
- Wildlife and wildlife habitats, and
- Bottomlands

Policy 1.1.1: The City shall continue to implement and maintain the Goals, Objectives and Policies of this Plan and the implementation of all land development codes.

Policy 1.1.2: The City shall require that a written assessment of environmental and ecological impacts, with the exception of single family residential uses, be performed by a qualified professional and reviewed by the Department of Community Development for all development applications.

OBJECTIVE 1.2: Informational and Educational Activities

The City shall provide information and educational activities for the citizens of Riviera Beach and assist them in understanding the needs and issues related to the conservation and sustainable use of the City's natural resources.

Policy 1.2.1: The City will coordinate, at a minimum, with the SFWMD, Palm Beach County, Department of Environmental Resource Management, FIND, and Florida Department of Environmental Protection regarding conservation efforts.

Policy 1.2.2: The City has and will continue to pursue a citizen involvement/public education project relating to the environmentally-sensitive and unique estuarine mangrove habitat located in the Lake Worth Lagoon located on the northern end of Singer Island.

GOAL 2 PROTECTION OF AIR QUALITY

To protect human life and native ecosystems by controlling air pollution through initiatives for the protection of air quality.

OBJECTIVE 2.1: Air Quality Standards

The City supports federally adopted air quality levels, as identified by National Ambient Air Quality Standards.

- **Policy 2.1.1:** The City shall continue to support the Palm Beach County Health Department in its implementation and/or support of the commitments in the Department of Environmental Protection's "Southeast Florida Ten Year Maintenance Plan" for maintaining the ozone standard.
- **Policy 2.1.2:** Continue to require landscaping as part of new private development and to landscape public areas in order to help cleanse the air.
- **Policy 2.1.3:** By 2015, the City will establish a "Green Canopy Program" as a means of urban beautification, reduction of the urban heat island effect, and improvement of air quality. The Green Canopy Program shall:
- Inventory the need for urban trees;
- Prepare a guide for selection, planting procedures, and care for urban trees;
- Allow for the private contribution of funds into a program that increases the number of trees in public spaces; and
- Ensure all new city road improvements include streetscaping plans that add to the City's urban tree canopy.

OBJECTIVE 2.2: Air Pollution Reduction

The City shall reduce air pollution in general and Carbon Monoxide emissions in particular by promoting mass transit whenever and wherever possible.

- **Policy 2.2.1:** The City shall coordinate with the County in implementing a bus shelter policy to enhance bus transit travel.
- **Policy 2.2.2:** Enhance the attractiveness of bus usage by including bus shelters and other incentives in the Broadway redevelopment area and throughout the City.
- **Policy 2.2.3:** As the downtown redevelopment progresses, the City shall investigate the feasibility of establishing and sustaining a shuttle bus to link the public beaches to downtown and local neighborhoods to assist in reducing air pollutions.
- **Policy 2.2.4:** The City will research ways to connect carbon monoxide emissions through its fleet ownership purchasing policies.

Policy 2.2.5: In order to reduce greenhouse gas emissions and the potential for urban sprawl, the City will utilize the Redevelopment Plan and the CRA to encourage new development to locate within the under-utilized downtown area. By 2010, the City will revise the land development regulations to ensure the downtown area:

- 1. Establishes an efficient land use pattern allowing mixed use development and the higher densities needed to support a viable transit system;
- 2. Creates a "park once" environment by providing a mix of uses within a pedestrian and bicycle-friendly environment of narrow streets with shaded sidewalks, appropriate landscaping and street details, and traffic calming measures such as on-street parking;
- 3. Promotes the optimum use of transit by maintaining and enhancing the walkable block structure and interconnected transportation network to effectively link transit station(s), bike paths, sidewalks, buildings, open spaces, and the waterfront.

GOAL 3 PROTECTION OF NATIVE COMMUNITIES AND ECOSYSTEMS

To conserve, appropriately use, and protect the natural functions of native communities and ecosystems.

OBJECTIVE 3.1: Native Communities and Ecosystems

The City shall preserve and protect native communities and ecosystems to ensure that representative communities remain intact. Priority shall be given to environmentally sensitive lands.

- **Policy 3.1.1:** The City will research various conservation tools to protect the estuary along the Lake Worth Lagoon.
- **Policy 3.1.2:** Development activities proposed in native ecosystems shall continue to be regulated through the Land Development Code to assure protection of environmentally sensitive lands and native communities. The City will explore incentives available to achieve this objective.
- **Policy 3.1.3:** The City shall continue to facilitate the acquisition, protection, and long-term maintenance of native plant communities through mechanisms including, but not limited to, conservation easements, grants and matching funds, and donations of land.
- **Policy 3.1.4:** The City shall continue to coordinate with all applicable public and private entities to protect and conserve environmentally sensitive lands and native ecosystems through the development review process, joint acquisition and management processes, interlocal agreements, and through other available means.
- **Policy 3.1.5:** The City supports utilizing Peanut Island as a passive recreational resource, with the amenities added by Palm Beach County.

Policy 3.1.6: *Special Preservation:* Mangrove, wetlands and special estuarine bottomlands. These mangroves and special estuarine bottomlands are protected by Federal, State and local agencies involved in wetlands preservation, dredge and fill permitting, and other hydrological modifications. It is the expressed policy objective of the City to regulate a developments of Submerged Lands except as specifically permitted by the land development code including but not limited to mangroves, wetlands and estuarine bottomlands, to the maximum extent permissible by law.

Policy 3.1.7: By 2009, The City shall adopt Land Development regulations addressing the use of the bottomlands for purposes listed above and which are compatible and/or consistent with the City's preservation policies contained in other elements within the Comprehensive Plan.

Policy 3.1.8: It is further the policy of the City to oppose any application for dredge or fill permits pending before applicable State or Federal agencies for lands in the Estuary Area. This policy objective shall not be construed nor implemented to impair or preclude judicially determined vested rights to develop or alter submerged lands.

OBJECTIVE 3.2: Wetlands

The City shall maintain the functions and values provided by freshwater and marine wetlands so there will be no net loss of wetland functions and values due to development or other activities.

Policy 3.2.1: The City shall continue to implement the Wetlands Protection Section of the Land Development Code and shall continue to review and comment on wetland alteration applications being reviewed by other agencies to ensure that no activity results in the net loss of wetland values and functions, being particularly diligent in the review of any coastal zone or wetland projects, in order to protect the Singer Island mangrove and wetlands, Lake Worth bottomland areas, and the most environmentally sensitive lands in the City. The City shall ensure that the following steps are taken, when assessing proposed activities that may result in wetland impacts:

- 1. Avoidance of wetland impacts
- 2. Minimization of unavoidable wetland impacts
- 3. Compensation for wetland impacts through mitigation

Policy 3.2.2: The City shall not allow activities that would diminish the functions and values of wetlands by altering the quantity or timing of water availability to existing wetlands or altering their water regimes.

Policy 3.2.3: By 20089, in the Land Development Code the City shall require, when reviewing development activities adjacent to or within wetland areas, that a buffer zone of native vegetation, which may include canopy, understory and ground cover, as appropriate, be provided and maintained around all wetlands.

Policy 3.2.4: The City by 2009 through its Land Development Code will preserve wetlands by listing the uses prohibited in or near wetlands or their transitional buffer zones.

Policy 3.2.5: The City shall support wetland creation, restoration, enhancement, and preservation and shall encourage public and private sector initiatives for these efforts.

OBJECTIVE 3.3: Preserve and Protect the Lake Worth Lagoon

The City shall coordinate with Palm Beach County, the SFWMD and the FDEP, as well as other municipalities along Lake Worth Lagoon to preserve and protect the Lagoon, through administration of the Land Development Code, enforcement of environmental regulations, and implementation of the Coastal Management Element.

- **Policy 3.3.1:** The City shall continue to exercise caution in granting concessions on the beach.
- **Policy 3.3.2:** In order to achieve protection of the natural Singer Island lakefront habitat (particularly mangroves, adjacent wetlands and significant estuarine bottomlands) the City shall continue to enforce the Wetlands Preservation Ordinance and shall continue to pursue public acquisition of submerged lands in part through coordination with various state grant programs for the acquisition of such properties and working with a public land trust.
- **Policy 3.3.3:** By 2009, the City will adopt land development regulations that mandate "no net loss of the 7,000 linear feet of natural shoreline bordering the Lake Worth Lagoon estuary on Singer Island," along with continuing to remove non-native/exotic species/vegetation as a tool in the preservation of this environmentally-sensitive area.

OBJECTIVE 3.4: Listed Species

The City shall protect and preserve endangered and threatened species, species of special concern, (hereafter collectively referred to as listed species), and their associated habitats.

- **Policy 3.4.1:** The City shall continue to require through the regulatory programs that developers protect, manage, or relocate listed species identified on their property in coordination with the appropriate Environmental Agencies.
- **Policy 3.4.2:** The City shall maintain in full force and effect and implement the codes, ordinances, and regulations associated with development and redevelopment activities to ensure that listed species and their habitats are protected.
- **Policy 3.4.3:** The City shall continue to require as part of the development application process listed species surveys for all sites known to or likely to contain listed species. The detailed surveys and conditions for their protection shall be required prior to development approval and shall include, but not be limited to, species type, location, and quantity.
- **Policy 3.4.4:** The City shall not issue a development order when listed plant or animal species are affected until conditions are provided for protection of the listed species.
- **Policy 3.4.5:** The City shall work to maintain existing species representation, and prevent plant and animal species in the City from becoming endangered or threatened, by protection of habitat for native species, implementation of the codes and ordinances identified in Objective 1.1, and the land acquisition and protection mechanisms identified in Objective 2.1.

OBJECTIVE 3.5: Invasive Non-native Plant Species

The City shall continue efforts to eradicate invasive non-native plant species and, where appropriate, require their removal and replacement with native plant species.

- **Policy 3.5.1:** The City shall continue to implement as a condition of all development orders the Sections of the LDC which require the immediate and long-term removal or eradication of invasive non-native plant species and prohibits the planting of these species.
- **Policy 3.5.2:** The City shall maintain programs for the eradication and control of invasive non-native plant species as part of the maintenance activities of City-owned or managed property. The City shall seek funding and enforcement procedures in cooperation with federal, state and county agencies in eradicating the invasive non-native vegetation.
- **Policy 3.5.3:** The City shall continue its cooperation and participation with Palm Beach County's Eradication Program for removing non-native/invasive species sponsored by the Department of Environmental Resources Management.

GOAL 4 PROTECTION OF SURFACEWATER AND GROUNDWATER QUALITY AND QUANTITY

To protect surface water and groundwater quality and quantity by discouraging activities that would damage or degrade water resources.

OBJECTIVE 4.1: Quality and Quantity of Water Resources

The City—through its Utility District---shall preserve and protect both the quality and quantity of the City's water resources so that future development activities are conducted in a manner that, at a minimum, meets state water quantity and quality standards.

- **Policy 4.1.1:** The City through its Utility District shall continue to work towards meeting the State mandate of providing alternative future water supplies to ensure the conservation/preservation of existing water resources. To that end, by 2008, the City will complete its required 10-year Water Supply Plan to be done in coordination with the 10-year plan of the SFWMD.
- **Policy 4.1.2:** By the year 2010, the City through its Utility District will submit a permit application to the SFWMD for desalination tanks to be constructed in the next 10-year planning period as its alternative to pumping and receiving water from existing aquifers.
- **Policy 4.1.3:** By 2008, the City through its Utility District will in its Land Development Code and Land Use Element—review, incorporate, and/or designate an updated policy that identifies allowable land uses in, near, or adjacent to wellfield protection areas located within the City. The policy will be based upon location of the use, wellfield zone, and amounts of discharge or other regulated substances to be

generated according to use.

- **Policy 4.1.4:** The City shall continue to review data from the existing surface water quality monitoring network to identify point-source and non-point source water quality problem areas and develop and implement programs designed to reduce point and non-point source discharges to surface waters. The City shall continue to enforce Surface Water Quality Standards and the Stormwater Pollution Prevention Ordinance throughout its jurisdiction. The City shall comply with the U.S. EPA National Pollutant Discharge Elimination System (NPDES) stormwater permit requirements.
- **Policy 4.1.5:** The City shall not take any land use actions, which are inconsistent with County, State, and the South Florida Water Management District efforts to maintain and/or improve water quality in the Lake Worth Lagoon estuary, or are in conflict with an adopted surface water improvement and management plan.
- **Policy 4.1.6:** The City supports the implementation of the 2007 Lake Worth Lagoon Management Plan. As part of that effort, the City and County shall coordinate on stormwater discharges into the Lake Worth Lagoon and other estuarine waters, to implement actions which meet or exceed the State's Class III Surface Water Quality Standards.
- **Policy 4.1.7:** The City shall continue to work toward reducing the number of the 18 direct stormwater outfalls into Lake Worth Lagoon by 2010.
- **Policy 4.1.8:** The City shall continue to enforce the provisions of the Wellfield Protection Ordinance and by 2008 will conduct an analysis to determine whether or not all potential development activities that could occur in or near wellfield areas will negatively impact the quality or quantity of the water resources.
- **Policy 4.1.9:** The City shall protect its wellfields from contamination in conjunction with the processes established by Palm Beach County and the FDEP, and through participation in the FDEP "Brownfields" program. Historically contaminated sites will be evaluated for participation in the EPA's "Superfund" program and federal or regional Brownfields redevelopment programs.
- **Policy 4.1.10:** The City shall --on an ongoing basis through its Capital Improvements Element-periodically review its infrastructure projects/activities to assure that potentially hazardous waste and sanitary sewer system connections will not adversely affect or interfere with water quality.
- **Policy 4.1.11:** The City shall coordinate with the County regarding hazardous waste +enforcement issues and shall notify the County of violations.

GOAL 5 PROTECTION OF NATURAL FLOODPLAINS

To manage its floodplain in such a way as to minimize hazards to public health, safety, and property and to preserve natural recharge areas.

OBJECTIVE 5.1: Identification and Mapping of Natural and Man-made Flood Prone Areas

The City shall continue to work with the digitized Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) rate maps and The Arbiter of Storms (TAOS) model projections for category 1 through 5 storm surge areas, and its own property appraiser maps to develop accurate overlays showing all areas prone to flooding within its jurisdiction.

Policy 5.1.1: The City will continue the process of acquiring all available Geographic Information System (GIS) data bases showing flood hazard areas within Riviera Beach and overlaying them with City property appraiser maps. These digital databases include:

- The NFIP rate maps;
- The new TAOS model storm surge projection maps; and
- The revised USGS topographic maps for Florida's east coast as they become available.

Policy 5.1.2: The City shall continually enhance its Land Development Code to identify additional measures that will improve its Community Rating System ranking in order to achieve more favorable flood insurance rates for residents of the City.

OBJECTIVE 5.2: Regulation and Mitigation

The City shall continue to regulate development in and around natural flood plain areas and areas subject to tropical storm and hurricane storm surge, and implement projects to mitigate long-term damage.

Policy 5.2.1: The City shall support the Local Mitigation Strategy (LMS), and the Countywide Project Prioritization List.

Policy 5.2.2: The City will continue its application process for membership in the FEMA NFIP - Community Rating System (CRS) program and to make any needed revisions to its flood elevation standards to continue to improve flood insurance rates in the City.

Policy 5.2.3: The City will continue to identify all relevant disaster-related capital projects, and submit them for inclusion on the LMS Countywide Project Prioritization List.

GOAL 6 PRESERVATION OF FISHERIES HABITAT & WATERFRONT ACCESS FOR RECREATIONAL FISHING

The goal of the City of Riviera Beach is to protect and enhance all critical habitats necessary to maintaining viable and stable populations of the many recreationally and commercially important fish and shellfish species caught in the surrounding waters.

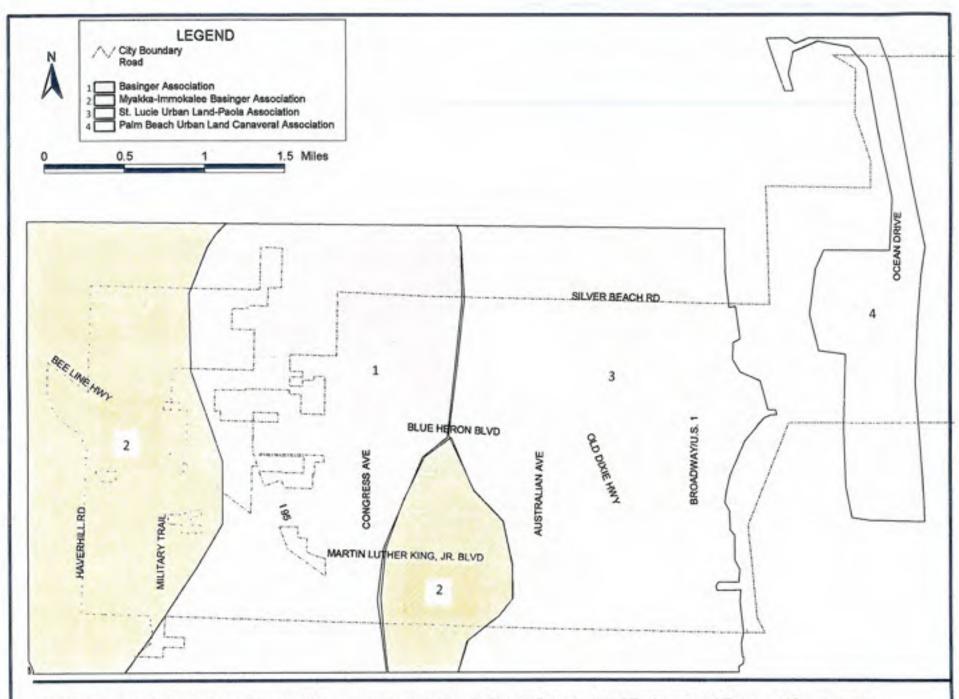
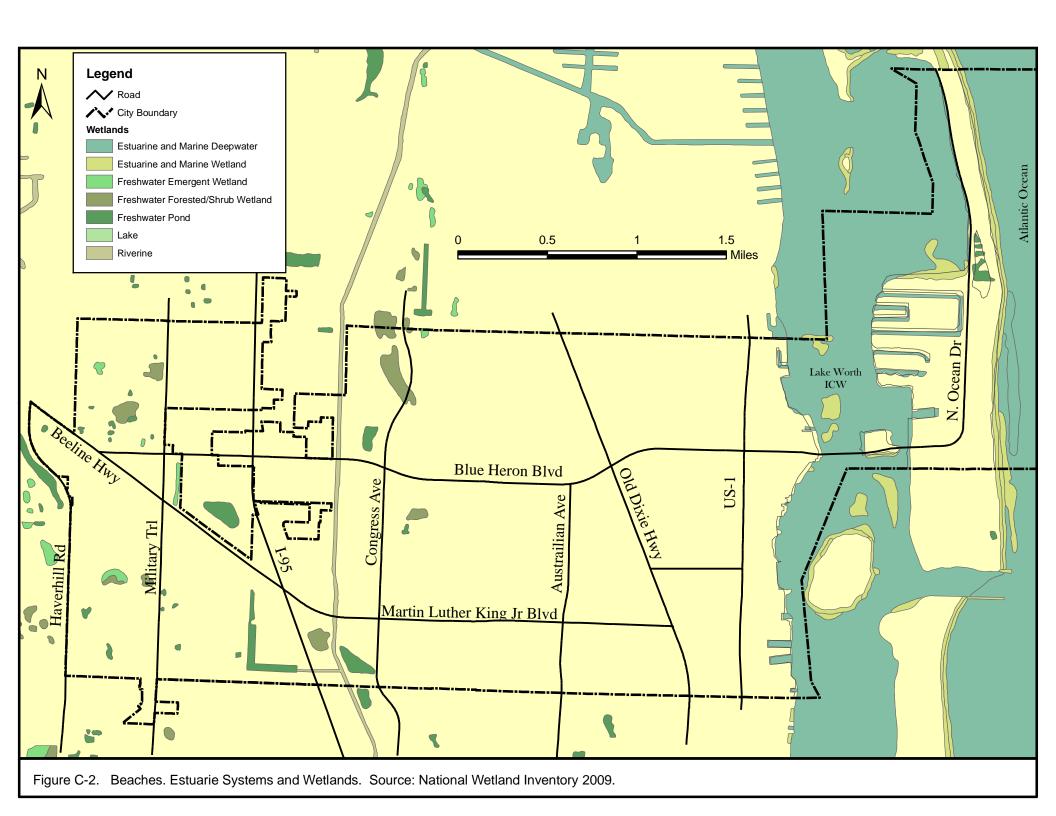


Figure C-1. Generalized area soils associations. Source: Palm Beach County Department of Environmental Resource Management.



OBJECTIVE 6.1: Preserve Fisheries Habitat

In order to increase the supply of fish, the City shall to the maximum extent possible support restoration of damaged fisheries habitat in and around the near shore and estuarine waters within its jurisdiction.

Policy 6.1.1: The City shall support the implementation of the Lake Worth Lagoon management plan and the installation of artificial fisheries habitats where they can be shown to be environmentally sound.

Policy 6.1.2: The City shall support public/private partnerships that seek to improve the quantity and quality of offshore fisheries habitat through the installation of artificial reefs and reef-like structures.

COASTAL MANAGEMENT GOALS, OBJECTIVES AND POLICIES

GOAL 1 ENVIRONMENTAL RESOURCES MANAGEMENT

To preserve, protect, and enhance coastal resources, and to discourage development activities that would damage or destroy coastal resources.

OBJECTIVE 1.1: Protection and Enhancement of Coastal Wetlands, Marine Resources, Coastal Beaches and Barriers, Wildlife, and Wildlife Habitat

The City of Riviera Beach shall continue to maintain and develop programs, and seek funding to expand its efforts necessary to protect, preserve and enhance coastal and estuarine wetlands, living marine resources, coastal barriers, and wildlife habitat.

Policy 1.1.1: The City shall continue to participate on the Countywide Coastal Council that, advises the Board of County Commissioners on federal, state, regional, municipal and environmental interests in the coastal area, recommending review criteria for shoreline development. Council membership is composed of appointed representatives of the County, the municipalities, special districts and environmental organizations.

Policy 1.1.2: The City shall protect freshwater, estuarine and marine wetlands, including mangroves, seagrasses, saltmarsh vegetation, offshore natural reefs, and productive submerged habitats through the implementation and maintenance of its applicable sections of the Land Development Code (LDC) and coordination with FDEP's Environmental Resource Permit Program. The City shall further prohibit